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UNITED STATES STANDARDS

FOR

APPLES

EFFECTIVE AUGUST 10, 1956



U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WASHINGTON, D. C.

UNITED STATES STANDARDS FOR

APPLES 1/

(21 F. R. 5084)

Effective August 10, 1956

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AUTHORITY: §§ 51.300 to 51.327 issued under sec. 205, 60 Stat. 1090, as amended; 7 U. S. C. 1624.

GRADES

§ 51.300 *U. S. Extra Fancy.* U. S. Extra Fancy consists of apples of one variety which are mature, but not overripe, carefully hand-picked, clean, well formed; free from decay, internal browning, internal breakdown, scald, scab, bitter pit, Jonathan spot, freezing injury, broken skins and bruises (except those that are slight and incident to proper handling and packing), and visible water core. The apples shall also be free from injury caused by russetting, sunburn or spray burn, limb rubs, hail, drought spots, scars, stem or calyx cracks, other diseases, insects, or mechanical or other means. Each apple of this grade shall have the amount of color specified in § 51.308 for the variety. (See §§ 51.308, 51.310, and 51.313.)

§ 51.301 *U. S. Fancy.* U. S. Fancy consists of apples of one variety which are mature but not overripe, carefully hand-picked, clean, fairly well formed; free from decay, internal browning, internal breakdown, bitter pit, Jonathan spot, scald, freezing injury, broken skins and bruises (except those incident to proper handling and packing), and visible water core. The apples shall also be free from damage caused by russetting, sunburn or spray burn, limb rubs, hail, drought spots, scars, stem or calyx cracks, other diseases, insects, or mechanical or other means. Each apple of this grade shall have the amount of color specified in § 51.308 for the variety. (See §§ 51.308, 51.310, and 51.313.)

51.302 *U. S. No. 1.* The requirements for this grade are the same as U. S. Fancy except for color and russetting. In this grade less color is required for all varieties except yellow and green varieties, for which the requirements for both grades are the same. Apples of this grade shall be free from excessive damage caused by russetting which means that they shall meet the russetting requirements for U. S. Fancy as defined under the definitions of "damage by russetting": *Provided, That, the aggregate*

¹Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act.

area of an apple which may be covered by smooth net-like russetting shall not exceed 25 percent; *And further provided*, That, the aggregate area of an apple which may be covered by smooth solid russetting shall not exceed 10 percent. (See §§ 51.308, 51.310, and 51.313.)

§ 51.303 *U. S. No. 1 Cookers.* U. S. No. 1 Cookers consists of apples of one variety which meet the requirements of U. S. No. 1 grade except as to color. This grade is provided for apples which are mature but which may not have sufficient color to meet the specifications of U. S. No. 1. (See §§ 51.310 and 51.313.)

§ 51.304 *U. S. No. 1 Early.* U. S. No. 1 Early consists of apples of one variety which meet the requirements of U. S. No. 1 grade except as to color, maturity and size. Apples of this grade have no color requirements, need not be mature, and shall be not less than 2 inches in diameter. This grade is provided for varieties such as Duchess, Gravenstein, Red June, Twenty Ounce, Wealthy, Williams, Yellow Transparent, and Lodi, or other varieties which are normally marketed during the summer months. (See §§ 51.310 and 51.313.)

§ 51.305 *U. S. Utility.* U. S. Utility consists of apples of one variety which are mature but not overripe, carefully hand-picked, not seriously deformed; free from decay, internal browning, internal breakdown, scald and freezing injury. The apples shall also be free from serious damage caused by dirt or other foreign matter, broken skins, bruises, russetting, sunburn, spray burn, limb rubs, hail, drought spots, scars, stem or calyx cracks, visible water core, other diseases, insects, or mechanical or other means. (See §§ 51.310 and 51.313.)

§ 51.306 *Combination grades.* (a) Combinations of the above grades can be used as follows:

(1) Combination U. S. Extra Fancy and U. S. Fancy.

(2) Combination U. S. Fancy and U. S. No. 1.

(3) Combination U. S. No. 1 and U. S. Utility.

(b) Combinations other than these are not permitted in connection with the United States apple grades. When Combination U. S. Extra Fancy and U. S. Fancy is packed, at least 25 percent of the apples in any lot shall meet the requirements of the higher grade in the combination. When Combination U. S. Fancy and U. S. No. 1 or Combination

U. S. No. 1 and U. S. Utility are packed, at least 50 percent of the apples in any lot shall meet the requirements of the higher grade in the combination. (See §§ 51.308, 51.310 and 51.313.)

§ 51.307 *U. S. Hail grade.* U. S. Hail grade consists of apples which meet the requirements of U. S. No. 1 grade except that hail marks where the skin has not been broken and well healed hail marks where the skin has been broken shall be permitted, provided the apples are fairly well formed. (See §§ 51.308, 51.310, and 51.313.)

COLOR

§ 51.308 *Color requirements.* In addition to the requirements specified for the grades set forth in §§ 51.300 to 51.307, apples of these grades shall have the percentage of color specified for the variety in Table I appearing in this section. For the solid red varieties the percentage stated refers to the area of the surface which must be covered with a good shade of solid red characteristic of the variety: *Provided*, That, an apple having color of a lighter shade of solid red or striped red than that considered as a good shade of red characteristic of the variety may be admitted to a grade, provided it has sufficient additional area covered so that the apple has as good an appearance as one with the minimum percentage of good red characteristic of the variety required for the grade. For the striped red varieties the percentage stated refers to the area of the surface in which the stripes of good shade of red characteristic of the variety shall predominate over stripes of lighter red, green, or yellow. However, an apple having color of a lighter shade than that considered as a good shade of red characteristic of the variety may be admitted to a grade: *Provided*, That, it has sufficient additional area covered so that the apple has as good an appearance as one with the minimum percentage of stripes of a good red characteristic of the variety required for the grade. Faded brown stripes shall not be considered as color except in the case of the Gray Baldwin variety.

TABLE I—COLOR REQUIREMENTS FOR SPECIFIED U. S. GRADES OF APPLES, BY VARIETIES

Variety	U. S. Extra Fancy	U. S. Fancy	U. S. No. 1
Solid Red:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Black Ben.....	75	50	25
Gano.....	75	50	25
Winesap.....	75	50	25
Other similar varieties ¹	75	50	25
Red Sport varieties ²	75	50	25
Striped or partially red:			
Cortland.....	66	33	25
Jonathan.....	66	33	25
McIntosh.....	66	33	25
Other similar varieties ³	66	33	25
Baldwin.....	50	25	15
Ben Davis.....	50	25	15
Delicious.....	50	25	15
Mammoth Black Twig.....	50	25	15
Northern Spy.....	50	25	15
Rome Beauty.....	50	25	15
Stayman.....	50	25	15
Turley.....	50	25	15
Wagener.....	50	25	15
Wealthy.....	50	25	15
Willow Twig.....	50	25	15
York Imperial.....	50	25	15
Other similar varieties ⁴	50	25	15
Hubbardston.....	50	15	10
Stark.....	50	15	10
Other similar varieties.....	50	15	10
Red June.....	50	15	(9)
Williams.....	50	15	(9)
Other similar varieties.....	50	15	(9)
Gravenstein.....	25	10	(9)
Other similar varieties ⁵	25	10	(9)
Red cheeked or blushed:			
Maiden Blush.....	(7)	(9)	(9)
Twenty Ounce.....	(7)	(9)	(9)
Winter Banana.....	(7)	(9)	(9)
Other similar varieties.....	(7)	(9)	(9)
Green varieties.....	(9)	(9)	(9)
Yellow varieties.....	(9)	(9)	(9)
Golden Delicious.....	(10)	(10)	(10)

¹ Arkansas Black, Beacon, Detroit Red, Esopus Spitzenburg, King David, Lowry, Minjon.

² When Red Sport varieties are specified as such they shall meet the color requirements specified for Red Sport varieties.

³ Haralson, Kendall, Macoun, Melba, Snow (Fameuse).

⁴ Bonum, Early McIntosh, Limbertwig, Milton, Nero, Paragon.

⁵ Tinge of color.

⁶ Duchess, Red Astrachan, Smokehouse, Summer Rambo.

⁷ Blush cheek.

⁸ None.

⁹ Characteristic ground color.

¹⁰ 75 percent characteristic color.

NOTE: "Characteristic color," when the white around the lenticels predominates over the green color, creating a mottling effect on the surface of the apple, it shall be considered as the minimum characteristic color.

UNCLASSIFIED

§ 51.309 *Unclassified.* Unclassified consists of apples which are not graded in conformity with any of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards but is provided as a designation to show that no definite grade has been applied to the lot.

TOLERANCES

§ 51.310 *Tolerances.* (a) In order to allow for variations incident to proper grading and handling, not more than a total of 10 percent of the apples in any lot may fail to meet the requirements of the grade: *Provided*, That, not more than one-half of this amount, or 5 percent, shall be allowed for apples which are seriously damaged by insects and including not more than 1 percent for apples affected by decay or internal breakdown or both.

(b) When applying the foregoing tolerances to Combination U. S. Extra Fancy and U. S. Fancy grade, no part of any tolerance shall be allowed to reduce, for the lot as a whole, the 25 percent of apples of the higher grade required in the combination, but individual containers shall have not less than 15 percent of the higher grade.

(c) When applying the foregoing tolerances to Combination U. S. Fancy and U. S. No. 1 grade and to Combination U. S. No. 1 and U. S. Utility grade, no part of any tolerance shall be allowed to reduce, for the lot as a whole, the 50 percent of apples of the higher grade required in the combination, but individual containers shall have not less than 40 percent of the higher grade.

§ 51.311 *Application of tolerances to individual packages.* The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations, provided the averages for the entire lot are within the tolerances specified for the grade:

(a) For packages which contain more than 10 pounds, and a tolerance of 10 percent or more is provided (as in the case of size, where a tolerance of 15 percent is provided) individual packages in any lot shall have not more than one and one-half times the tolerance specified. For packages which contain more than 10 pounds and a tolerance of less than 10 percent is provided, individual packages in any lot shall have not more than double the tolerance specified, except that at least one apple which is seriously damaged by insects or affected by decay or internal breakdown may be permitted in any package.

(b) For packages which contain 10 pounds or less, individual packages in any lot are not restricted as to the percentage of defects: *Provided*, That, not more than one apple which is seriously damaged by insects or affected by decay or internal breakdown may be permitted in any package.

§ 51.312 *Basis of calculating percentages.* (a) When the numerical count is marked on the container, percentages shall be calculated on the basis of count.

(b) When the minimum diameter or minimum and maximum diameters are marked on the container, percentages shall be calculated on the basis of weight.

(c) When the apples are in bulk, percentages shall be calculated on the basis of weight.

CONDITION

§ 51.313 *Condition after storage or transit.* Decay, scald, or any other deterioration which may have developed on apples after they have been in storage or transit shall be considered as affecting condition and not the grade.

SIZE

§ 51.314 *Size requirements.* The numerical count or the minimum diameter of the apples packed in a closed container shall be indicated on the container.

(b) When the numerical count is marked on the container the minimum size of the largest apple shall be not more than one-fourth inch larger than the minimum size of the smallest apple.

(c) When the numerical count is not shown the minimum diameter shall be plainly stamped, stenciled, or otherwise marked on the container in terms of whole inches, whole and half inches, whole and quarter inches, or whole and eighth inches, as $2\frac{1}{2}$ inches minimum, $2\frac{1}{4}$ inches minimum, or $2\frac{5}{8}$ inches minimum, in accordance with the facts. It is suggested that both minimum and maximum diameters be marked on the container; as $2\frac{1}{4}$ to $2\frac{3}{4}$ inches, or $2\frac{1}{2}$ to $2\frac{3}{4}$ inches, as such marking is especially desirable for apples marketed in the export trade.

(d) The measurement for minimum size shall be the largest diameter of the apple taken at right angles to a line from the stem end to the blossom end. The measurement for maximum size shall be the smallest dimension of the apple determined by passing the apple through a round opening.

(e) In order to allow for variations incident to proper sizing, not more than 5 percent of the apples in any lot may not meet the size requirements: *Provided*, That, when the maximum and minimum sizes are both stated, an additional 10 percent tolerance shall be allowed for apples which are larger than the maximum size stated.

PACKING AND MARKING

§ 51.315 *Packing requirements—(a) Representative face packing.* Each package shall be packed so that the apples on the shown face shall be reasonably representative in size, color and quality of the contents of the package.

(b) *Boxes.* (1) Apples packed in the standard northwestern apple boxes shall be arranged in the containers according to the approved and recognized methods with the stems pointing toward the ends of the boxes, except when jumbled. All packages shall be well filled but not to the extent as to cause excessive or unnecessary bruising to the apples because of overfilled packages. Apples packed in the standard northwestern apple boxes shall be tightly packed with sufficient bulge to prevent any appreciable movement of the apples within the containers when lidded. Each wrapped apple shall be completely enclosed by its individual wrapper.

(2) Apples packed in other type boxes, such as nailed wooden boxes, wire-bound boxes, and fibreboard boxes, may be place packed, jumble packed faced, or jumble packed, and all packs shall be well filled.

(3) Apples packed in boxes equipped with cell compartments or molded trays shall be of the proper size for the cells or the molds in which they are packed.

(4) Apples packed in consumer unit cartons and packed into shipping containers shall completely fill the shipping container.

(c) *Baskets.* Apples packed in U. S. standard bushel baskets, one-half bushel baskets and five-eighths bushel baskets may be ring faced and shall be tightly packed with sufficient bulge to prevent any appreciable movement of the apples within the containers when lidded.

(d) *Tolerances.* In order to allow for variations incident to proper packing, not more than 5 percent of the containers in any lot may not meet these requirements.

§ 51.316 *Suggestions for marking containers.* (a) In order to conserve space, abbreviations may be used for marking United States grade names on containers. The following abbreviations are suggested where it is not desired to use the full grade name:

- (1) U. S. Ex. Fcy. for U. S. Extra Fancy.
- (2) U. S. Fcy. for U. S. Fancy.
- (3) U. S. No. 1 for U. S. No. 1.
- (4) U. S. Util. for U. S. Utility.

(5) Combination grades may be designated by abbreviations of the grades preceded by the abbreviation "Comb.", as "Comb. U. S. Fcy.-U. S. No. 1".

STANDARDS FOR EXPORT

§ 51.317 *Standards for export, as applied to condition factors.* (a) The apples in any lot shall be generally tightly packed when in baskets, and generally fairly tightly or tightly packed when in boxes.

(b) Not more than 5 percent of the apples in any lot shall be further advanced in maturity than firm ripe.

(c) Not more than 5 percent of the apples in any lot shall be damaged by storage scab.

(d) Not more than a total of 5 percent of the apples in any lot shall be damaged by bitter pit, Jonathan spot, scald, internal breakdown, water core, freezing, decay, or other such condition factors: *Provided*, That,

(1) Not more than 2 percent shall be allowed for apples affected by decay;

(2) Not more than 2 percent shall be allowed for damage by internal breakdown;

(3) Not more than 2 percent of slight scald shall be permitted for apples properly packed in oiled paper or which have been especially treated with oil to prevent scald; otherwise, the apples must be free from scald.

(e) Any lot of apples shall be considered as meeting the standards for export if the entire lot averages within the requirements specified: *Provided*, That no sample from the containers in any lot is found to exceed double the percentages specified, except that for packages which contain 10 pounds or less, individual packages in any lot are not restricted as to the percentage of defects if the entire lot averages within the tolerances specified.

DEFINITIONS

§ 51.318 *Mature.* "Mature" means that the apples have reached the stage of growth which will insure the proper completion of the ripening process. Before a mature apple becomes overripe it will show varying degrees of firmness, depending upon the stage of the ripening process. The following terms are used for describing these different stages of firmness of apples:

(a) "Hard" means apples with a tenacious flesh and starchy flavor.

(b) "Firm" means apples with a tenacious flesh but which are becoming crisp

with a slight starchy flavor, except the Delicious variety.

(c) "Firm ripe" means apples with crisp flesh except that the flesh of the apples of the Gano, Ben Davis, and Rome Beauty varieties may be slightly mealy.

(d) "Ripe" means apples with mealy flesh and soon to become soft for the variety.

§ 51.319 *Overripe.* "Overripe" means apples which are dead ripe, with flesh very mealy or soft, and past commercial utility.

§ 51.320 *Carefully hand-picked.* "Carefully hand-picked" means that the apples do not show evidence of rough handling or of having been on the ground.

§ 51.321 *Clean.* "Clean" means that the apples are free from excessive dirt, dust, spray residue and other foreign material.

§ 51.322 *Well formed.* "Well formed" means that the apple has the normal shape characteristic of the variety, except that the shape may be slightly irregular, provided, it does not detract from the general appearance of the apple.

§ 51.323 *Injury.* "Injury" means any defect which more than slightly affects the appearance, or the edible or shipping quality of the apples.

(a) Russeting in the stem cavity or calyx basin which cannot be seen when the apple is placed stem end or calyx end down on a flat surface, shall not be considered in determining whether or not an apple is injured by russeting, except that rough or bark-like russeting in the stem cavity or calyx basin shall be considered as injury when the appearance of the apple is materially affected. The following types and amounts of russeting outside of the stem cavity or calyx basin, shall be considered as injury:

(1) Smooth net-like russeting, when an aggregate area of more than 5 percent of the surface is covered, and the color of the russeting shows no very pronounced contrast with the background color of the apple, or lesser amounts of more conspicuous net-like russeting when the appearance is affected to a greater extent than the above amount permitted.

(2) Smooth, solid russeting which covers an aggregate area of more than one-half inch in diameter, and the pattern and color of the russeting shows no very pronounced contrast with the background color of the apple, or lesser

amounts of more conspicuous solid russetting when the appearance is affected to a greater extent than the above amount permitted.¹

(3) Slightly rough russetting which covers an aggregate area of more than one-fourth inch in diameter.¹

(4) Rough russetting, unless it is well within the stem cavity or calyx basin and is not readily apparent.

(b) Any one of the following defects, or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as injury:

(1) Sunburn or spray burn, when the discolored area does not blend into the normal color of the fruit.

(2) Dark brown or black limb rubs which affect a total area of more than one-eighth inch in diameter, except that light brown limb rubs of a russet character shall be considered under the definition of injury by russetting.¹

(3) Hail marks, drought spots or other similar depressions or scars where there is appreciable discoloration other than russetting, or when the indentations are not superficial, or when an individual indentation exceeds one-eighth inch in diameter, or the total affected area exceeds one-fourth inch in diameter.¹

(4) Stem or calyx cracks which are not well healed, or well healed stem or calyx cracks which exceed a length of one-eighth inch.

(5) Diseases:

(i) Cedar rust infection which affects a total area of more than one-eighth inch in diameter.¹

(ii) Sooty blotch or fly speck which is thinly scattered over more than 5 percent of the surface, or dark, heavily concentrated spots which affect an area of more than one-fourth inch in diameter.¹

(iii) Red skin spots which are thinly scattered over more than one-tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-fourth inch in diameter.¹

(6) Insects:

(i) Any healed sting or healed stings which affect a total area of more than one-eighth inch in diameter including any encircling discolored rings.¹

(ii) Worm holes.

§ 51.324 *Fairly well formed.* "Fairly well formed" means that the apple may be slightly abnormal in shape but not to an extent which detracts materially from its appearance.

§ 51.325 *Damage.* "Damage" means

any defect which materially affects the appearance, or the edible or shipping quality of the apples.

(a) Russetting in the stem cavity or calyx basin which cannot be seen when the apple is placed stem end or calyx end down on a flat surface shall not be considered in determining whether or not an apple is damaged by russetting, except that excessively rough or bark-like russetting in the stem cavity or calyx basin shall be considered as damage when the appearance of the apple is materially affected. The following types and amounts of russetting outside of the stem cavity or calyx basin, shall be considered as damage:

(1) Russetting which is excessively rough on Roxbury Russet and other similar varieties.

(2) Smooth net-like russetting, when an aggregate area of more than 15 percent of the surface is covered, and the color of the russetting shows no very pronounced contrast with the background color of the apple, or lesser amounts of more conspicuous net-like russetting when the appearance is affected to a greater extent than the above amount permitted.

(3) Smooth solid russetting, when an aggregate area of more than 5 percent of the surface is covered, and the pattern and color of the russetting shows no very pronounced contrast with the background color of the apple, or lesser amounts of more conspicuous solid russetting when the appearance is affected to a greater extent than the above amount permitted.

(4) Slightly rough russetting which covers an aggregate area of more than one-half inch in diameter.¹

(5) Rough russetting which exceeds one-fourth inch in diameter, unless it is well within the stem cavity or calyx basin and is not readily apparent.¹

(b) Any one of the following defects, or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(1) Sunburn or spray burn which has caused blistering or cracking of the skin, or when the discolored area does not blend into the normal color of the fruit unless the injury can be classed as russetting.

(2) Limb rubs which affect a total area of more than one-half inch in diameter,

¹ The area refers to that of a circle of the specified diameter.

except that light brown limb rubs of a russet character shall be considered under the definition of damage by russetting.¹

(3) Hail marks, drought spots, or other similar depressions or scars which are not superficial, or when such injury affects a total area of more than one-half inch in diameter.¹

(4) Stem or calyx cracks which are not well healed, or well healed stem or calyx cracks which exceed an aggregate length of one-fourth inch.

(5) Diseases:

(i) Scab spots which affect a total area of more than one-fourth inch in diameter.¹

(ii) Cedar rust infection which affects a total area of more than one-fourth inch in diameter.¹

(iii) Sooty blotch or fly speck which is thinly scattered over more than one-tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter.¹

(iv) Red skin spots which are thinly scattered over more than one-tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter.¹

(6) Insects:

(i) Any healed sting or healed stings which affect a total area of more than three-sixteenths inch in diameter including any encircling discolored rings.¹

(ii) Worm holes.

§ 51.326 *Seriously deformed*. "Seriously deformed" means that the apple is so badly misshapen that its appearance is seriously affected.

§ 51.327 *Serious damage*. "Serious damage" means any defect which seriously affects the appearance, or the edible or shipping quality of the apples.

(a) The following types and amounts of russetting shall be considered as serious damage:

(1) Smooth solid russetting, when more than one-half of the surface in the aggregate is covered, including any russetting in the stem cavity or calyx basin or slightly rough, or excessively rough or bark-like russetting which detracts from the appearance of the fruit to a greater extent than the amount of smooth solid russetting permitted: *Provided*, That, any amount of russetting shall be permitted on Roxbury Russet and other similar varieties.

(b) Any one of the following defects, or any combination thereof, the seriousness of which exceeds the maximum al-

lowed for any one defect, shall be considered as serious damage:

(1) Sunburn or spray burn which seriously detracts from the appearance of the fruit.

(2) Limb rubs which affect more than one-tenth of the surface in the aggregate.

(3) Hail marks, drought spots, or scars, if they materially deform or disfigure the fruit, or if such defects affect more than one-tenth of the surface in the aggregate: *Provided*, That, no hail marks which are unhealed shall be permitted and not more than an aggregate area of one-half inch shall be allowed for well-healed hail marks where the skin has been broken.¹

(4) Stem or calyx cracks which are not well healed, or well healed stem or calyx cracks which exceed an aggregate length of one-half inch.

(5) Visible water core which affects an area of more than one-half inch in diameter.¹

(6) Diseases:

(i) Scab spots which affect a total area of more than three-fourths inch in diameter.¹

(ii) Cedar rust infection which affects a total area of more than three-fourths inch in diameter.¹

(iii) Sooty blotch or fly speck which affects more than one-third of the surface.

(iv) Red skin spots which affect more than one-third of the surface.

(v) Bitter pit and Jonathan spot which is thinly scattered over more than one-tenth of the surface and does not materially deform or disfigure the fruit.

(7) Insects:

(i) Healed stings which affect a total area of more than one-fourth inch in diameter including any encircling discolored rings.¹

(ii) Worm holes.

¹The area refers to that of a circle of the specified diameter.

Dated: July 5, 1956.

[SEAL]

FRANK E. BLOOD,
Acting Deputy Administrator,
Marketing Services.

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